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Forest
Service

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Date: June 22, 2005

Dennis Ditmanson
Superintendent
Pecos National Historical Park
P.O. Box 418
Pecos, NM 87552

Dear Dennis:

During our March visit to Pecos National Historical Park, we met with Dan Jacobs, Chief Park Ranger of your staff, to discuss bark beetle implications for a meadow restoration plan which involved cutting in the piñon-juniper type. At Dan's request, Terry Rogers and I made a follow-up visit on June 9, 2005 to view the progress of the project and to evaluate the condition of piñon infested with piñon needle scale in one of the treated areas. Upon arrival, we were introduced to your newly appointed Park Ranger, Ted Benson, who joined us in a tour of ongoing operations.

The day we visited, two different types of masticating attachments, a Hydro-Ax® brush cutter (below, left) and a Fecon Bull Hog® (below, right), each on a rubber-tired carrier, were operating.



The contractor is making good progress and the treated areas are meeting desired condition objectives. Where sensitive cultural sites necessitate hand clearing, the debris is being placed outside the site boundary so the masticator can run over the wood to shred it. Dan is monitoring the progress of the hand-crews so that none of the cut wood is left whole beyond the suggested four-week limit. This prevents bark beetles from having sufficient time to reproduce in the fresh material.



While Dan expressed some concern about heavy accumulation of wood shreds where tree density had been exceptionally high (background in photo below shows pre-treatment density of foreground), these spots seem to be only a small proportion of the treated area and may serve to provide some heterogeneity in the landscape.

The piñon debris should break down rather quickly; however, the juniper may take longer due to its natural resistance to decay. In the longer term, any excess residue should be consumed during prescribed burning. From a piñon ips bark beetle perspective, the high proportion of juniper in the mix and the character of the mastication residue (fine enough to dry out quickly) are minimizing the attraction value for the beetles.



Regarding the need to prune residual piñon to reduce fire laddering potential, I would wait until the fall to conduct these operations since wounding a standing piñon during the growing season is an invitation to beetles. Optimum timing for pruning would be November through December, but this could be stretched some in either direction for practicality. Limbs less than four inches in diameter can be left on site since the bark thickness is insufficient to support ips beetle development. Larger limbs which have a chance to dry completely before initial beetle emergence in April can also be left. If cut wood more than four inches in diameter becomes covered with snow prior to drying, it may retain sufficient moisture to support ips colonization the following spring.

Although the piñon needle scale activity we saw is quite severe on some residual piñon, Terry feels the trees will recover, particularly now that competition for moisture has been reduced. Note the difference in the needle scale-infested tree on the left, and the unattacked tree on the right. Both display ground-level limb retention that makes pruning necessary to reduce fire laddering potential.



We believe the meadow restoration project is progressing well and all guidelines suggested during our first visit are being observed (refer to our letter of March 21, 2005 for more specifics). Please don't hesitate to contact us if you have additional questions.

Sincerely,

/s/ Debra Allen-Reid
DEBRA ALLEN-REID
New Mexico Zone Leader, Forest Health

cc: Leonard Lucero, Douglas L Parker, John Anhold, Terry J Rogers
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